





City of Santa Barbara
Public Works
Department
Annual Report
2011



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Director's Message

Welcome to the City of Santa Barbara Public Works Department Annual Report. Fiscal Year 2011 has been a busy and productive year for the Department and the City. Projects funded by the American Recovery and Reinvestment Act (ARRA), several scheduled bridge replacement projects, the Airport Terminal Building and on-going transportation improvements were just some of the many projects that were accomplished this year.

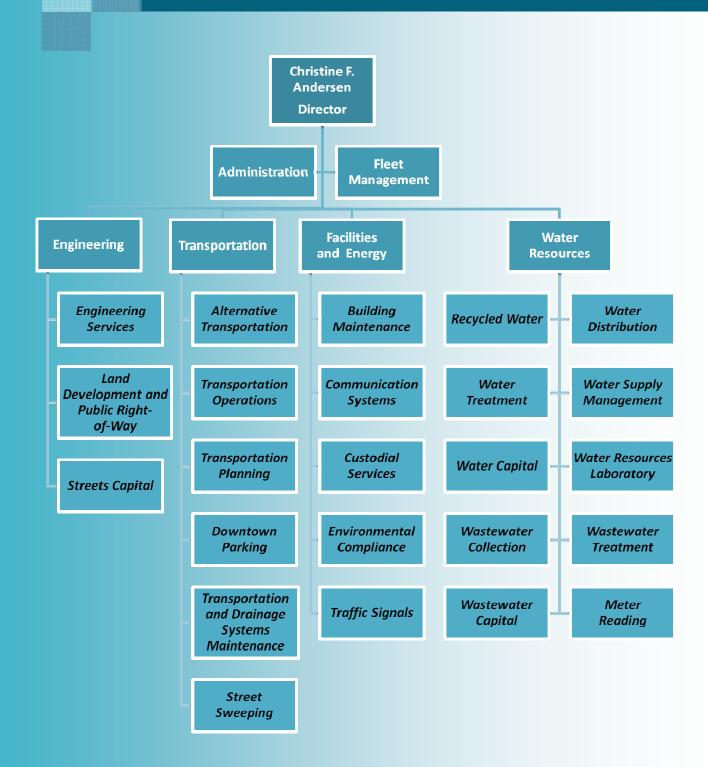
While the larger, more visible projects are easily recognized, the Public Works Department is also responsible for a variety of city-owned infrastructure operation and maintenance programs which support ongoing, critical City services. These programs include, downtown parking and the street and sidewalk system, maintenance of all City-owned buildings, and all water and wastewater services throughout the City.

By planning ahead the Public Works Department has been able to leverage federal and state grants and loan funding for needed infrastructure repair and improvement projects. These "shovel-ready" projects maintain the systems that are critical to facilitate commerce create jobs and serve the community. We hope you have noticed and are seeing some of the benefits of the projects identified in this Report in your neighborhood. Construction can be a challenge for neighboring property owners and residents and it is a very important part of our work to ensure that the construction experience is as positive as we can make it.

Please take a moment to review your Public Works
Department's accomplishments and learn more about
the Public Works Department and how we work to
support the community of Santa Barbara. For additional information, please visit us on the web at:
http://www.santabarbaraca.gov/Government/
Departments/PW/

Christine F. Andersen Public Works Director City of Santa Barbara

Organization Chart



Engineering



Program Areas

Engineering Services: Provides professional engineering and construction management support for City Departments and all Capital projects to maintain and improve the City's infrastructure.

<u>Land Development</u>: Manages the public right-ofway and City-owned lands, protects the interests of the general public, and processes private development review applications and permits.

Streets Capital: Manages the maintenance and repair of, and improvements to the public right-of-way infrastructure in accordance with City Council goals and the Circulation Element of the City's General Plan. The Street Capital Program provides the public with safe, efficient, functional, high quality, and cost effective transportation and drainage systems.

Did you Know...

...that the Engineering Division manages the maintenance program for 238 miles of streets and alleys and 35 bridges?

ARRA Sidewalk Repair, Access Ramps & Road Overlay

Each year the City budgets for sidewalk repairs, access ramps and road overlay (street maintenance) projects. The American Recovery & Reinvestment Act (ARRA) provided approximately \$3 million in additional project funding during fiscal year 2011 and City installed, via contract, over 30,000 additional square feet of sidewalk and 59 additional access ramps at various locations throughout the City. ARRA funding also made it possible to maintain three major roadways: Upper State Street, De La Vina Street, and Alameda Padre Serra, in addition to the City streets identified through the annual street maintenance program.

Cliff Drive Underground Utilities Assessment District

The Cliff Drive Underground Utility Project, was completed this year and significantly improved the overall visual quality of the Mesa neighborhood. The project, located on Cliff Drive from Mesa Lane to just east of Meigs Road, was completed in June 2011. All existing overhead utility wires and facilities that supply electric, communication, and similar services were placed underground and portions of the system upgraded to safer, more efficient 120/240 volt streetlight systems.

Bridge Replacement Projects

Fiscal year 2011 saw completion of the first in a series of bridge replacement projects scheduled over the next three years. The Haley/De La Vina Street Bridge construction began in the winter of 2009 and was completed in April 2011.

Then, in May 2011, construction began to replace the Ortega Street Bridge with a longer structure designed to allow a greater quantity of water to flow under the bridge during storms and alleviate potential flooding. Work will include removing and replacing concrete and creek walls, improving wildlife habitat and installing street and intersection improvements.

Transportation



Program Areas

<u>Alternative Transportation</u>: Plans and coordinates projects and programs that promote alternative modes of transportation that are widely available and attractive to the public.

<u>Downtown Parking</u>: Operates and maintains the City's parking facilities and on-street parking supply to maximize their use by customers and employees that shop and work in the Downtown Business District thereby enhancing the economic vitality of the Downtown area.

<u>Transportation Planning</u>: Reviews private land development projects and plans public transportation facilities and policy so that people can move within the City with equality of convenience and access using all modes of transportation.

<u>Transportation Operations</u>: Effectively manages the transportation network by identifying and designing improvements that are responsive to the needs of all travel modes so that people and goods can move safely and efficiently throughout the City.

Transportation and Drainage Systems Maintenance: Cleans, maintains, and repairs transportation and drainage system infrastructure to enhance community mobility and preserve creeks and water quality.

<u>Street Sweeping</u>: Cleans streets to improve neighborhood appearance and water quality in urban creeks.

Did you Know...

...that the Transportation Division operates five parking garages, seven parking lots & two commuter lots totaling over 3,300 parking spaces?

Credit Cards Now Accepted at Downtown Parking Lots and Garages

The City is now accepting Visa, MasterCard and Discovery credit cards at downtown parking lots and garages. Using a credit card upon exiting parking facilities allows motorists an easy payment option and gives parking attendants the ability to quickly complete transactions. No more waiting in line to exit because someone didn't have the cash to pay their fee!

Hourly parking remains the same, with the first 75 minutes free, courtesy of the Downtown Merchants, and \$1.50 for each hour or part of hour thereafter.

Structural Upgrades to Lots 9 & 10

Seismic upgrades were completed in the spring of 2011 at Lots 9 and 10.

The parking lots were temporarily closed during the construction, however, Lot 10 reopened ahead of schedule and Lot 9 reopened on time. Special thanks to the public and area businesses for their patience during this important safety upgrade project.

Jake Boysel Multi-purpose Pathway

The Jake Boysel Multi-purpose Pathway was completed in the spring of 2011 and is an off-street path for bicyclists and pedestrians as alternative to travel on Calle Real near Highway 154. The pathway provides important connections for students travelling to and from nearby schools including, La Colina Junior High, Bishop Diego High School, and Hope Elementary School. The project was funded entirely by a Safe Routes to School grant.

Facilities & Energy



Program Areas

Building Maintenance: Provides operational, maintenance and construction services to City-owned facilities and maintain a clean, safe, and functional environment in which to conduct City business.

<u>Communications Systems</u>: Provides and maintains the citywide radio, telephone, microwave, Combined Communications Center (911), and associated electronic communications systems, ensuring uninterrupted high quality communications operations.

<u>Custodial Services</u>: Provides custodial service to specified City-owned facilities and ensures a clean and safe environment for staff and the public.

Environmental Compliance: Properly manages and disposes of hazardous materials, and complies with State regulations applying to City-owned and operated fueling stations with Underground Storage Tanks, Leaking Underground Fuel Tanks and Site Mitigation Units.

<u>Traffic Signals</u>: Maintains a safe, efficient and reliable Citywide Traffic Signal System Network and provides funding for electrical energy for streetlights and traffic signals.

Did You Know...

...that the Facilities & Energy Division took advantage of vacated offices during the 2010 holiday furlough, painted and replaced carpet in City offices, and avoided disruption of City services?

Los Banos del Mar Pool Pump Replacement

Los Banos del Mar, the City's community swimming pool, is a cornerstone of the City's Recreation Program. To keep the pool running at optimum performance, the filter pumps at the pool run continuously.

The Facilities & Energy team worked with Pool staff to rebuild the pumps and install high-efficiency motors. New variable speed frequency drives and control allow the pumps to run at lower speeds during the nighttime hours when the pool is not being used.

Energy use at the Los Banos Pool facility has been reduced by half, resulting in \$15,500 in annual savings. The project was funded by a Work Force Housing grant and also received a rebate from Southern California Edison. The City's share of the net cost of the project was \$2,700.

Power Purchase Agreement

As a part of the wastewater treatment process, the El Estero Wastewater Treatment Plant operates two digesters that produce methane gas (digester gas). The digester gas is currently used for plant heating operations.

Public Works researched options and selected a company to construct, operate, and sell electricity and provide waste heat to the plant via an engine cogeneration system through a Power Purchase Agreement between the company and the City.

The new system has significant economic and environmental benefits for the City. The cost of the electricity purchased by the City through the Power Purchase Agreement will be at or below the cost of electricity purchased from the electrical utility. At the current cost of electricity, purchase of electricity from the project is expected to save about \$55,000 per year. Previously, excess digester gas was burned at a waste gas flare, but with the new system, all gas is used, no gas is flared, and the system accommodates emission limits set by the Air Pollution Control District.

Fleet Management





Program Area

Fleet Management manages the motorized fleet and provides fleet services to cost effectively provide safe, reliable vehicles and equipment for all City Department.

Did You Know...

...that Fleet Management manages and maintains 483 City vehicles valued at over \$34 million and completes most maintenance services to ensure vehicle readiness and safety to maximize the useful life of each City vehicle?

Pool Vehicle Program

Fleet Management expanded use of the INVERS automatic key dispatch system for the City's fleet in 2011. The system allows staff to make on-line pool car reservations and retrieve and re-deposit the key automatically at the pool car 's location.

The program facilitates car-sharing and efficient car use. Eleven cars have been eliminated from the City's vehicle pool since 2009, resulting in \$264,000 in one-time savings and \$24,000 in ongoing annual savings.

City-wide Fleet Reduction

In 2009, Fleet Management performed a detailed analysis to evaluate methods to use the City's fleet more efficiently and cost effectively.

First, the use of City vehicles by staff was evaluated. Second, the maintenance vs. the vehicle maintenance costs were analyzed. Third, if the number of vehicles could be reduced, what were the savings in staff hours and overall costs?

The results showed that some cars were being underutilized. In 2009, the fleet had 512 vehicles. In 2011, the number has dropped to 483, a reduction of 29 vehicles City-wide. Due to the reduced number of vehicles, a repair technician was eliminated reducing City staff. With modifications in fleet management, the City has realized \$1,103,000 in one time savings for vehicle replacement and \$160,000 of savings resulting from reduced maintenance costs.

Water



Program Area

Recycled Water: Provide cost efficient treatment and distribution of recycled water in accordance with State regulations in order to conserve City potable water supplies

<u>Water Distribution</u>: Conveys water to customers in a reliable and cost-efficient manner and provides drinking water that meets all state and federal regulations.

<u>Water Treatment:</u> Provide safe drinking water that is treated in a cost efficient manner and complies with state and federal regulations.

<u>Water Supply Management</u>: Provides an adequate water supply by implementing the Long Term Water Supply Program, including a cost effective water conservation element and managing a diverse portfolio of supplies.

<u>Water Capital:</u> Develops, funds, designs and constructs projects that will maintain, upgrade and enhance the City's water system infrastructure in order to ensure a continual supply of safe water for both domestic and fire protection purposes.

<u>Water Resources Management:</u> Provides support and direction to staff in order to ensure that City water, wastewater, hazardous and solid waste systems program are reliable, comply with all permits and regulations, protect public health and the environment, and are cost efficient.

<u>Meter Reading:</u> Reads water meters for accurate and timely utility billings, and responds to field service requests in a timely, courteous, efficient and safe manner.

Did You Know...

...water flows over six miles from Lake Cachuma via the Tecolote Tunnel to the Cater Water Treatment Plant entirely by gravity?

Escondido & Bothin Pump Station Rehabilitation

Water pumps, electrical motors, electrical switch gear, valves, piping, instrumentation and Supervisory Control and Data Acquisition (SCADA) systems integration design was completed for the Escondido and Bothin Pump Stations. The existing equipment and systems are outdated and nearing the end of their useful lifecycles. The project is also designed to increase the size of the pumps at the Escondido Pump Station, improving water flow and fire protection. Project construction is scheduled for fiscal year 2012.

The design includes replacing the variable sped pumps and motors with equipment with variable frequency drives, thus enhancing energy savings and water system control. The pump station rehabilitation projects are anticipated to reduce energy demand by 44,414 kilowatt-hours per year, resulting in a one-time savings of approximately \$7,000 and an anticipated annual energy cost savings of approximately \$5,000.

Cater Ozone & Ortega Groundwater Treatment Projects Receive State Funding

The City has received a State Revolving Fund loan for two projects that will improve the City's water supply.

The Carter ozone Project will install an ozonation facility at the Cater Water Treatment Plan, which will enable South Coast water agencies to consistently comply with State drinking water regulations.

The Ortega Groundwater Treatment Project (ODTP) will refurbish the existing groundwater treatment plant and filters. The Ortega Treatment Plant is a critical component of the City's water supply portfolio and the project will enable staff to more effectively use the City's groundwater supplies, especially during periods of drought or emergency.

Wastewater



Program Areas

<u>Wastewater Collection</u>: Conveys wastewater to the City' El Estero Wastewater Treatment Plant, while meeting all applicable state and federal regulations, and protecting the environment.

<u>Wastewater Treatment</u>: Provides cost efficient wastewater treatment, protects ocean water quality and public health, and complies with National Pollutant Discharge Elimination System (NPDES) permit requirements.

<u>Water Resources Laboratory</u>: Provides cost efficient analytical testing services and high quality data to meet the testing requirements of the water and wastewater systems.

<u>Wastewater Capital</u>: Expedites development, design and construction of wastewater related projects that will maintain, upgrade and/or enhance the infrastructure of the wastewater system in order to meet NPDES requirements and protect the environment.

Did You Know...

...that Wastewater rehabilitated over six miles of wastewater collection system pipeline this year and treated 2.9 billion gallons of wastewater?

Dramatic Reduction in Collection System Overflows

From 2010 to 2011, Wastewater began optimizing collection system maintenance practices by managing and maintaining the wastewater collection system differently that in the past. The maintenance focus has shifted to effectively clean the pipes that make up the wastewater collection system.

Wastewater also rehabilitated over six miles of older collection system pipe. Regular system maintenance and pipe replacement together have resulted in fewer blockages in the wastewater collection system and significantly fewer overflows over the past nine months (November 2010-June 2011).

Fat, Oils and Grease (FOG) Program

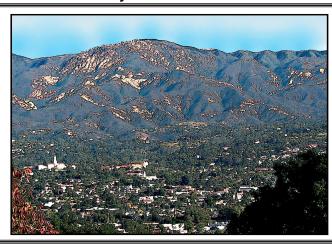
The El Estero Wastewater Treatment Plant is leading the way to a more sustainable future for the City by designing an injection system to divert fats, oils, and grease (FOG) materials collected from area restaurants to the plant's digesters.

El Estero has two anaerobic digesters which produce methane gas as a by-product of the treatment process. The methane can be used as a fuel source to generate electricity and heat for the plant. The FOG program is anticipated to increase gas production by using the FOG on-site and also reduces the need to haul the grease away for disposal.

The FOG program will reduce the truck trips required to haul excess grease long distances for disposal and is anticipated to increase methane gas generation that can be used in the co-generation of heat and electricity at the Plant (see Facilities & Energy section for additional information). The FOG program will also reduce up to 17 metric tons of carbon dioxide-equivalent emissions annually.

Capital Improvement Program

City of Santa Barbara



2012-2017 Capital Improvement Program January 2011

The Capital Improvement Program (CIP) is a City-wide infrastructure planning tool that is coordinated and developed by the Public Works Department, Administrative Division, usually every two years, just prior to budget development.

The CIP identifies projects intended to improve the City's public infrastructure in the areas of streets, transportation and parking structures, street lights, traffic signals, City telephone and information systems, public buildings, sewers, storm drains, and the water distribution and wastewater systems infrastructure.

Development of the CIP is a collaborative process. The Department of Public Works solicits projects identified by each City Department that respond to anticipated community needs, policy, or other directives for the next six-years. The projects are reviewed, development steps and special circumstances identified in consultation with the City Engineer and City Planner, as well as various Boards and Commissions that govern each program area. The Draft VCIP is reviewed at publicly noticed meetings of the Finance Committee and City Council.

The Fiscal Year 2012—2017 CIP includes:

- 330 projects identified over the next six-years
- A total estimated cost of approximately \$1.58 billion
- 220 active projects
- 21 new projects
- 61 fully-funded projects

Need Help?

Parking

- Downtown Parking Lots
- Bike Parking
- Downtown Shuttle Service
- Bus Passes
- Resident Permit Parking

Downtown Parking Program 564-5656

Streets, Lights, & Signage

- Street Closures
- Alternative Transportation
 Transportation Division 564-5416
- Street Lights
 Street Light Hotline 564-5416
- Potholes
 Pothole Hotline 897-2630
- New Street Signs or Curb Marking Street Sign Hotline 560-7569
- Street Flooding
 Storm Drain Hotline 564-5858
- Street Sweeping
 Street Sweeping Hotline 897-1903

Public Transportation

Bus Route Information
 Metropolitan Transit Center
 683-3702

Trash or Water Billing

Water Billing 564-5343

City Facilities Maintenance

Facilities Maintenance 560-7500

Permits (In the Public Right-of-Way)

Public Works Permit Counter 564-5388

Water Conservation

Water Conservation Hotline 564-5460

Water Quality Information

Cater Water Treatment Plant 897-2609

City Construction Information

Engineering 564-5363

Community Clean-Up

Looking Good Santa Barbara
 Adopt-A-Block Program 897-2526

Graffiti Hot Line 897-2513

Abandoned Shopping Carts 800-252-4613

Contact Us

City of Santa Barbara Public Works Department

Office Location: 630 Garden Street Santa Barbara, CA 93101

Mailing Address:
P.O. Box 1990
Santa Barbara, CA 93102-1990

(805) 564-5377

Office Hours:

7:30 A.M. to 5:00 P.M. (PT), Monday thru Thursday and 7:30 A.M. to 4:30 P.M. (PT), alternate Fridays

Permit Counter Hours:

8:30 A.M. to 5:00 P.M. (PT), Monday thru Thursday and 8:30 A.M. to 4:30 P.M. (PT), alternate Fridays

For emergency after hours or weekend water or sewer line breaks, or to report street flooding call (805) 963-4286

For all other emergencies, Please call 911